

Abstract

A ferroelectric memory device including an extended memory unit features a cell array block, a data bus unit, an input/output circuit unit, an extended memory unit and an extended memory controller. The cell array block includes a main bitline and a plurality of sub bitlines. The main bitline is connected between a main bitline pull-up controller and a column selection controller, and each sub bitline is connected to the main bitline and a unit cell. The data bus unit is connected to the column selection controller. The input/output circuit unit includes a sense amplifier array connected to the data bus unit. The extended memory unit shares the main bitline included in the cell array block and includes a plurality of cell blocks. The extended memory controller controls the extended memory unit in response to an external control signal.